

BOARD OF SUPERVISORS

Brown County



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LAND CONSERVATION SUBCOMMITTEE

Norbert Dantine, Jr., Chair
Dave Kaster, Vice Chair
Bernie Erickson, Dave Landwehr, Tom Sieber

LAND CONSERVATION SUBCOMMITTEE

**Monday, January 26, 2015
6:00 p.m. (PD&T to Follow)
Room 161, UW Extension
1150 Bellevue Street**

**NOTICE IS HEREBY GIVEN THAT THE COMMITTEE MAY TAKE ACTION ON
ANY ITEMS LISTED ON THE AGENDA**

- I. Call Meeting to Order.
- II. Approve/Modify Agenda.
- III. Approve/Modify Minutes of November 24, 2014.

Comments from the Public

- 1. Monthly Budget update (November 2014).
- 2. Budget Adjustment Request (14-105): Any increase in expenses with an offsetting increase in revenue.
- 3. Certificate of Appreciation – Norb VandeHei.
- 4. Demo Farm Update.
- 5. 2014 Department Annual Report and Accomplishments.
- 6. Department Openings summary.
- 7. Letters of support NRCS and DNR.
- 8. Directors Report.
- 9. Such Other Matters as Authorized by Law.
- 10. Adjourn.

Norb Dantine, Jr., Chair

Notice is hereby given that action by the Committee may be taken on any of the items which are described or listed in this agenda. Please take notice that it is possible additional members of the Board of Supervisors may attend this meeting, resulting in a majority or quorum of the Board of Supervisors. This may constitute a meeting of the Board of Supervisors for purposes of discussion and information gathering relative to this agenda.

PROCEEDINGS OF THE BROWN COUNTY
LAND CONSERVATION SUBCOMMITTEE

Pursuant to Section 18.94 Wis. Stats., a regular meeting of the **Brown County Land Conservation Subcommittee** was held on Monday, November 24, 2014 in Room 161, UW Extension, 1150 Bellevue Street, Green Bay, WI

Present: Chairman Dantine, Supervisor Bernie Erickson, Supervisor Landwehr,
Supervisor Tom Sieber, Supervisor Dave Kaster, Norb VandeHei
Also Present: Jim Jolly, Jon Bechle, Executive Streckenbach, Chad Weininger and other interested parties

I. Call Meeting to Order

The meeting was called to order by Chairman Dantine at 6:00 p.m.

II. Approve/Modify Agenda.

Motion made by Supervisor Landwehr, seconded by Supervisor Sieber to approve. Vote taken.
MOTION CARRIED UNANIMOUSLY.

III. Approve/Modify Minutes of October 27, 2014.

Motion made by Supervisor Kaster, seconded by Supervisor Erickson to approve.
Vote taken. MOTION CARRIED UNANIMOUSLY.

Comments from the Public None.

1. Budget Status Financial Report for October, 2014.

Land and Water Conservation Director Jim Jolly informed they were doing really well. They had a rough conservative estimate that they would be at least \$48,000 in the black at the end of the year. Their permits were going to be up a little bit and they had other revenues that could potentially come in before the end of the year.

Motion made by Supervisor Sieber, seconded by N. Vande Hei to receive and place on file. Vote taken. MOTION CARRIED UNANIMOUSLY.

2. Budget Adjustment Request (14-98): Reallocation of more than 10% of the funds original appropriated between any of the levels of appropriation.

The Land and Water Conservation Department would like to use one-time staff personnel cost savings to purchase 2 certified used vehicles or new (Chevy Equinox or similar SUV) to replace a 1997 Dodge Intrepid and a 1998 Dodge Dakota. The personnel savings is a one-time savings due to the inability to find qualified staff to fill open positions in early 2014.

Additionally, the vehicles being replaced were identified in the original Fleet Management Plan as needing replacement in 2017.

Jolly informed that he was working with Operations Manager Tony Elfe at the Highway Department; they will be buying three trucks off the state purchasing agreement. If they add vehicles to it, they can get even better deals.

Motion made by Supervisor Landwehr, seconded by Supervisor Sieber to approve. Vote taken.
MOTION CARRIED UNANIMOUSLY.

3. **Director's Report.**

Jolly updated the committee on the manure, the timing and the weather within the county. They were in a world of hurt right now, it was brutal and farmers weren't able to get the manure out. He had staff inform that they were going to try and help them find places where it was the least minimal environmental risk, and that was the best they could do with the winter spreading plans. It was a late spring planting, a late harvest and now they get snow and rain; there was nothing they could do. The environmental degradation was going to be higher this year than most. They were trying to do their best and plan the fields with the least environmental risk.

This year gave them a reason to pursue technology really hard, something that gave the landowners an alternative, some kind of waste transformation, some place they could take their manure when they got into situations like this to help them out. They had the opportunity to do that with a community feasibility study that WPS was funding next year.

This week they had three new grants, \$69,000 grant from the National Fish and Wildlife Foundation to a fish bypass around the pond across the street from the zoo. They received \$150,000 from NRDA to continue the West Shore activities. He talked them into allowing them to use \$60,000 of that for staffing for 2016. Jolly received a call at the end of last week from Gary of US Fish and Wildlife Services; they were giving them \$10,000 to use as supplemental money to give to landowners. It was a good week.

With regard to the Demo Farms, they were teaming up with USGS and UWGB to make sure they study the health of the soils on the farms. They were trying to increase the soil structure, the infiltration rates. They had done some testing and in good structured soils with a lot of organic matter, they could get 12-14" of infiltration per hour. On the soils they typically had in the county, about 1.3" an hour. If they could increase infiltration rates by that level, they could significantly reduce their runoff volume. USGS was going to help them develop a paired watershed study, take one field that had two five acre watersheds coming through it, they were going to treat one of those five acre segments in the traditional way and the other half of the field, ramp up the conservation efforts so that they could immediate results in a side by side comparison. That should help them get quicker results to make better decisions. In January they will give a full update on what they did with that project.

Motion made by Supervisor Landwehr, seconded by Supervisor Sieber to receive and place on file. Vote taken. MOTION CARRIED UNANIMOUSLY.

Other

4. **Such other matters as authorized by law.**

Land Conservation Subcommittee Chairman Dantine thanked Citizen Rep Norb Vande Hei for serving and participating on their committee for eight years. His term will be up in 2016 so December would be his last meeting. He will be missed.

5. **Adjourn.**

Motion made by N. Vande Hei, seconded by Supervisor Sieber to adjourn at 6:13 p.m. Vote taken. MOTION CARRIED UNANIMOUSLY.

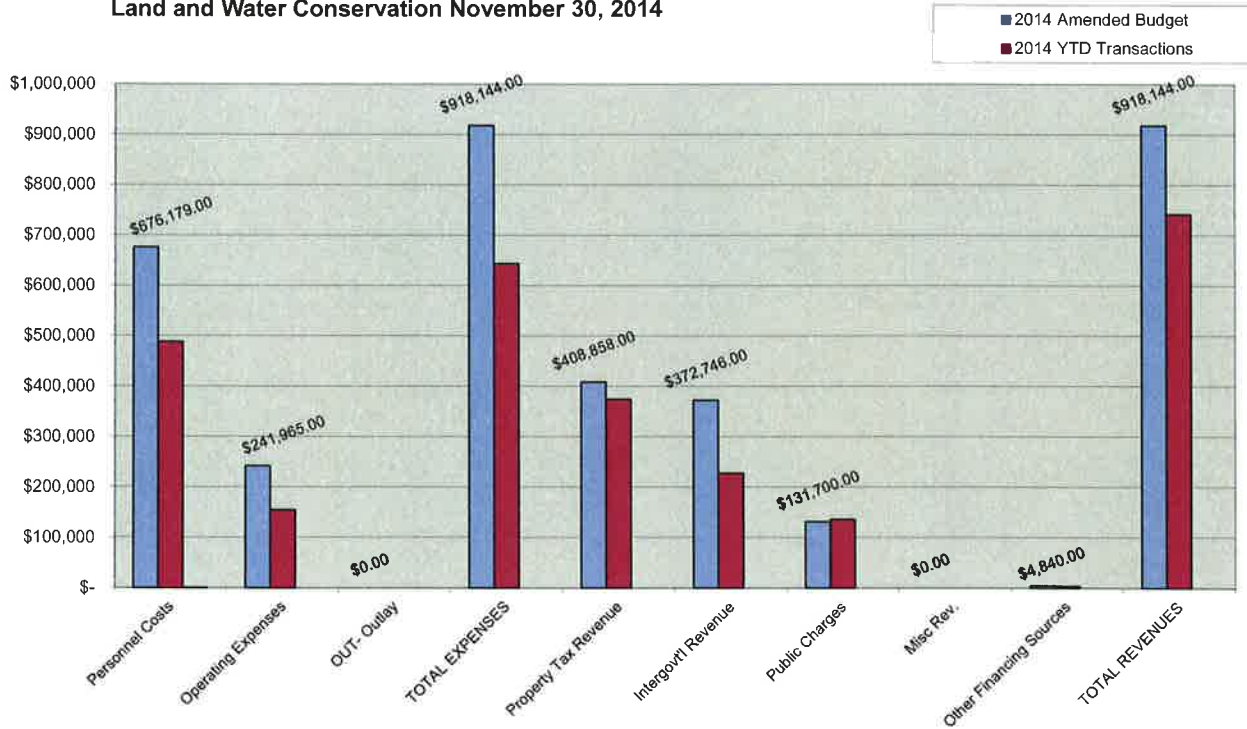
Respectfully submitted,
Alicia A. Loehlein
Recording Secretary

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Brown County Land & Water Conservation
Budget Status Report (unaudited)
November 30, 2014

	<u>2014 Amended</u>	<u>2014 YTD</u>		<u>2013 Amended</u>	<u>2013 YTD</u>
	<u>Budget</u>	<u>Transactions</u>		<u>Budget</u>	<u>Transactions</u>
Personnel Costs	\$676,179.00	\$488,691.33	Personnel Costs	\$590,799.00	\$467,793.48
Operating Expenses	\$241,965.00	\$154,881.01	Operating Expenses	\$252,330.00	\$199,369.25
OUT- Outlay	\$0.00	\$0.00	OUT- Outlay	\$29,163.00	\$27,540.00
TOTAL EXPENSES	\$918,144.00	\$643,572.34	TOTAL EXPENSES	\$872,292.00	\$694,702.73
Property Tax Revenue	\$408,858.00	\$374,786.50	Property Tax Revenue	\$392,030.00	\$359,360.87
Intergov't'l Revenue	\$372,746.00	\$227,688.13	Intergov't'l Revenue	\$246,520.00	\$218,174.08
Public Charges	\$131,700.00	\$135,734.11	Public Charges	\$143,000.00	\$135,216.43
Misc Rev.	\$0.00	\$0.00	Misc Rev.	\$0.00	\$250.00
Other Financing Sources	\$4,840.00	\$3,763.00	Other Financing Sources	\$15,742.00	\$12,447.50
TOTAL REVENUES	\$918,144.00	\$741,971.74	TOTAL REVENUES	\$797,292.00	\$725,448.88

Land and Water Conservation November 30, 2014



14-105

BUDGET ADJUSTMENT REQUEST

Category

- ☐ 1 Reallocation from one account to another in the same level of appropriation
- ☐ 2 Reallocation due to a technical correction that could include:
- Reallocation to another account strictly for tracking or accounting purposes
 - Allocation of budgeted prior year grant not completed in the prior year
- ☐ 3 Any change in any item within the Outlay account which does not require the reallocation of funds from another level of appropriation
- ☐ 4 Any change in appropriation from an official action taken by the County Board (i.e. resolution, ordinance change, etc.)
- ☐ 5 a) Reallocation of up to 10% of the originally appropriated funds between any levels of appropriation (based on lesser of originally appropriated amounts)
- ☐ 5 b) Reallocation of more than 10% of the funds original appropriated between any of the levels of appropriation.
- ☐ 6 Reallocation between two or more departments, regardless of amount
- ☒ 7 Any increase in expenses with an offsetting increase in revenue
- ☐ 8 Any allocation from a department's fund balance
- ☐ 9 Any allocation from the County's General Fund

Approval Level

Dept Head
Director of Admin

County Exec

County Exec

Admin Committee

Oversight Comm
2/3 County Board

Oversight Comm
2/3 County Board

Oversight Comm
2/3 County Board

Oversight Comm
2/3 County Board

Oversight Comm
Admin Committee
2/3 County Board

Justification for Budget Change:

2015* The Land & Water Conservation Department received an additional \$150,000 award through the NRDA program to continue work within the West Shore Pike Project area through 2016. This award dictates that funds must be allocated towards staff salary/fringe and landowner payments.

Increase	Decrease	Account #	Account Title	Amount
<input checked="" type="checkbox"/>	<input type="checkbox"/>	110.048.301.4302	State Grant Revenue	\$150,000
<input checked="" type="checkbox"/>	<input type="checkbox"/>	110.048.301.5100	Regular Earnings	\$60,000
<input checked="" type="checkbox"/>	<input type="checkbox"/>	110.048.301.5801	Landowner payments	\$90,000
<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	<input type="checkbox"/>			

AUTHORIZATIONS

James R. Jolly
Signature of Department Head

Department: Land & Water Conservation

Date: 12/8/14

[Signature]
Signature of BOA or Executive
Date: 12/12/14

CERTIFICATE OF APPRECIATION

Awarded to

NORBERT VANDE HEI
8 YEARS OF SERVICE

ON BEHALF OF THE BROWN COUNTY LAND CONSERVATION COMMITTEE AND STAFF
PLEASE ACCEPT OUR SINCERE CONGRATULATIONS AND
APPRECIATION FOR YOUR DEDICATION AND SERVICE TO BROWN COUNTY

Dated this 26th day of January, 2015

Norbert Dantinne
Chair - Brown County Land Conservation Committee



2014 Farm Demo Project Update

Project Overview

Four landowners were recruited to participate in the Demonstration Farm Network – Greg Nettekoven (cash grain, no manure), Van Wychen Farms (cash grain with manure), Brickstead Dairy (CAFO), and Tinedale Farms (CAFO). Each of the participants committed 200 acres to implementing innovative agronomic practices through the 5-year project.

Project Updates

Veris Testing was conducted on 3 of the 4 demo farm sites (Brickstead Dairy, Van Wychen Farms, G. Nettekoven). Growers, consultants, and suppliers are using Veris soil EC sensors to devise management zones, set soil sampling locations, create variable rate seeding prescriptions, better manage nitrogen applications, and improve irrigation prescriptions. Soil EC is soil electrical conductivity – a measurement of how much electrical current soil can conduct. It's an effective way to map soil texture because smaller soil particles, such as clay, conduct more current than larger silt and sand particles.



Veris Sensor

Farm Site Updates

Greg Nettekoven – 2014 Results

- Gypsum was applied at a 1 ton/acre rate on ½ of a wheat field. (This work is being done in cooperation with Glacierland RC&D)
- Red Clover was planted in August 2014. In spring 2015, corn will be no-tilled into the red clover. We are hoping to gain some nitrogen credit from the red clover this coming year.
- Soil testing and Veris testing was completed using GPS at 2.5 ac point samples.
- The following field had wheat on it in 2014. Triticale, tillage radish, and Berseem Clover were no-tilled into this field.



Photo Taken 9/18/14



Photo Taken 9/29/14



- The plan is to take $\frac{1}{2}$ to $\frac{3}{4}$ of this field to harvest and leave the remainder until corn is planted in the spring of 2015. Corn will be no-tilled into the standing Triticale and harvested parts of this field. This field will need to be sprayed in to control the Triticale and Berseem Clover, so corn can get established. (see photo below)



2014 Summary - Fall harvest was a challenge. The harvest occurred too late on the remaining fields to get cover established in time. Planting covers when the crop is growing is going to need to be priority as we work through this project.

Van Wyche Farms – 2014 Results

- Hosted a Farm Demo Field Day (Oct 2, 2014).
- Established a cover crop plot at the southern site. Cover Crops have been established on all acres needed for the 2015 growing year.
- Soil and Veris testing was completed.
- Cover crops of barley, Austrian peas, and radish were planted over the top of maturing soybeans at the northern plot using a high boy spreader (see photos below).



Photos taken 9/18/14



- The northern plot will have a series of 4 agronomic practices which will remain the same throughout the 5-year project:
 1. No-till planting without cover crop
 2. No-till planting with cover crop
 3. Conventional planting without cover crop
 4. Conventional planting with cover crop
- The field day was held on the southern plot. Presenters included:

Mike Haedt, Biomass Sales and Consulting
 Keith Rohm, Service Motors
 Kevin Fermanich, UW-Green Bay
 Jamie Patton, UW Extension Shawano County
 Francisco Arriaga, UW Madison Soil Science
 Barry Bubolz, NRCS

2014 Summary – Again weather was a factor in the implementation of some of the practices that were planned for the fall. Attempts will be made in 2015 to try these practices.

Tinedale Farms – 2014 Results

- Struggled throughout the season with infiltration and crusting problems causing emergence issues.
- Rain events and late maturity caused harvest issues which resulted in poor cover crop establishment.



2014 Summary – Tinedales are doing a lot of great things on their farm. They have planted many more acres in cover crops beyond what was implemented as part of the Demo Project.

Brickstead Dairy – 2014 Results

- Struggled with getting cover crops established at the demo sites due to late harvest and weather.
- Completed many of the practices that NRCS required.



Waterway on southern demo field 9/29/14

- Aerial seeded many acres that were not part of the demo project. Cover crops were planned at these sites. However, weather did not permit the no-till seeding.



Cover crops

2014 Project Summary

Overall, the project struggled with weather this year. We will definately be looking at earlier cover crop establishment in the growing season and before harvest. Different varities of corn will also need to be looked at (shorter maturity, etc).

The CAFO operations have a major challenge in the of timing manure application with cover crop establishment. The planting and establishment of cover crops after the harvest will be very difficult it not impossible. Cover crops for CAFO's will need to planted before the harvest allowing them time to get established prior to fall manure applications.

2014 Annual Accomplishment Report - LWCD

Working Lands Initiative

WLI participating landowners are reviewed for compliance with NR 151 which includes field erosion, nutrient management, manure storage safety and farmstead discharges. Brown County staff creates conservation plans to address any identified issues. Through the tax credit incentive landowners are encouraged to not only keep farmland from being developed but are required to protect water quality at the same time.

In 2014, approximately 100 landowners had their land evaluated and about 80 conservation plans were developed covering over 10,000 acres. The focus in these conservation plans will primarily be focused on reducing sediment and nutrient loads from agricultural fields.

DOR records show 518 participating landowners claiming credits on 71,394 acres receiving \$547,890 in property tax relief.

The department continues to take the position that every landowner who participates in the program will remain eligible to receive tax credits until: 1) their farm inspection has been completed, 2) conservation plan is created indicating compliance is required, and 3) the landowner refuses to cooperate and comply with the conservation requirements of the program.

In 2014 staff accomplished:

- 100 farms inspected
- 80 farms needed schedules of compliance and signed contracts with NRCS/LWCD to implement conservation provisions

Accomplishment discussion:

- Our overall goal was to inspect 130 farms and create 100 schedules of compliance. The department fell short of those goals due to being short one staff person for the first six months of the year.
- In 2014, the Department revised its approach to accomplishing its goals. A new protocol was developed for inspecting land to simplify the process. Working agreements with NRCS (Federal partner) were formalized creating a strategic implementation strategy utilizing our combined staffs. The County received grants in the form of a contribution agreement to add an additional staff for implementation. Also efforts were made to streamline the conservation plan process. Also in 2014, the department initiated a team oriented management structure to improve overall communication and increase efficiencies.
- In 2014, the Brown County Board of Supervisors approved a contribution agreement with USDA-NRCS totaling over \$200,000 to implement conservation practices in the GLRI project area. The agreement funds a staff position for 2 years (minimum) at 75%.

Great Lakes Demonstration Farms Network

The Demonstration Farms Network established partnerships with four area producers, (Two in Brown County and two in Outagamie County) with the goal of improving soil health in the region. The improvement of soil health will dramatically increase the biology of the soil by giving bacteria, microrhizal fungi, protozoa, and other microbial life a food source throughout the entire year. These food sources, (various cover crops) help the biology rebuild the structure of the soil by gluing soil together; thus reducing soil runoff and increasing water infiltration.

The Farm Demonstration Network project works collaboratively with the Natural Resources Conservation Service (NRCS), The Great Lakes Commission, Outagamie County LWCD, Four Producers, UWGB, UW-Extension, and Four CCA Agronomy Consultants from around the area and Various Equipment Dealers. In association with these partners the Farm Demonstration Network held its first field day on Oct 2nd 2014 to demonstrate the practices that will improve soil health. Several State Newspapers and a local TV station attended the field day. The field day was a great success!

The Farm Demonstration Network has spurred a lot of interest among the farming community. Each producer has their own spin on what will and will not work. We will have some failures but we will also take great strides in the improvement of overall water quality once we put the puzzle pieces together. The opportunities for academia, agronomy consultants, producers and Agencies are numerous. Some examples of new practices are robotic cover crop seeding, aerial seeding over standing crops, no-till planting into cover crops, and side dressing liquid manure into standing corn; just to name a few.

Producers from throughout the Lower Basin have been or will be invited to attend field days and workshops which will present data discovered through some of the various practices already mentioned. We will continue outreach with producers, agency, and consultants through the avenues of newsletters, mailings, email, radio, TV, texts and internet.

Animal Waste Management Ordinance

Brown County adopted the Animal Waste Management Ordinance in 1986 and since over 300 permits have been issued. The purpose of this ordinance is to regulate the location, construction, installation, alteration, design, and use of animal waste storage facilities and animal feedlots to protect the groundwater and surface water resources of Brown County.

Accomplishment discussion:

- Assisted with surveying, design, and installation of a total of 78 conservation practices. Of that total, 20 practices were directly related to the Animal Waste Management Ordinance.
- Inspected operations with over 500 animal units and developed 35 inspection reports. Those operations out of compliance were given options to bring them back into compliance with state standards and prohibitions.
- Reviewed 23 permits for animal waste management ordinance.
- Continued to assist and provide support to state and federal agencies in regards to engineering, complaints, and ordinance issues.



9 Key Element Watershed Plan- Upper East River Watershed

In 2012 the EPA approved a Total Maximum Daily Load (TMDL) for Phosphorus and sediment for the Lower Fox River Basin. A TMDL establishes limits on the amount of pollutants a water body can handle in order to meet water quality standards. Once a TMDL is established and approved by EPA, the first step in meeting the TMDL is to develop a “9 Key Element Plan” for each subwatershed. These plans utilize information gathered within each watershed through an inventory process.

In 2014 staff accomplished:

- Worked with Outagamie County LCD staff to develop a plan to inventory Upper East River Watershed.
- Began inventorying farm production sites, streambanks, and analyzing cropland to determine sources of sediment and phosphorus

Accomplishment Discussion

Staff was given one year to complete the inventory and information gathering process and compile the 9 Key Element Plan for the watershed. Brown County LWCD will receive \$20,000 in additional funding towards this effort. The plan document is scheduled to be finalized by October 2015.

Multi-County conservation practice tracking system

It is the goal of Brown, Outagamie and Calumet Counties to create a unique and powerful conservation planning/implementation tracking tool that can be collectively utilized to compete for funding opportunities on a regional level. This tool will also be utilized to verify installed practices which the counties as well as point source community will need for long term P credit verification and compliance with state standards and prohibitions. In 2014, a Nonpoint Source Implementation Plan for the Plum and Kankapot Creeks Subwatershed (9 Key Element Plan) was developed. Field work has now begun to inventory the Upper East River Subwatershed to develop a similar plan for this area. These and future 9 Key Element Plans will form the basis for implementation efforts of the Lower Fox River TMDL Plan. Brown County shares

subwatershed boundaries with Outagamie and Calumet Counties, and the three counties have agreed to work collaboratively to create a consistent tracking program using GIS layers.

Accomplishment discussion:

The counties met three times during 2014 to review current tracking systems and databases and to develop protocol for a common system.

Wildlife Damage Program

The Wildlife Damage Abatement and Claims Program provide damage prevention assistance and partial compensation to farmers when wild deer, bear, geese and turkey damage their agricultural crops.

In 2014, the Brown County Wildlife Damage Abatement and Claims Program:

- Enrolled 22 participants which resulted in 1 cost share agreement for abatement materials, 13 deer shooting permits, 1 turkey shooting permit and an estimated 10 damage claims. Total eligible claims are estimated at approximately \$50,000.
- Staff assisted hunters, farmers, gardeners, homeowners, municipalities and other counties with requests for information and assistance with wildlife damage and nuisance issues.

Accomplishment discussion:

Enrollment in the program is on an annual basis and therefore participation can fluctuate from year to year depending on factors such as crop type, weather, wildlife populations, field location, etc. The wet field conditions in fall delayed the harvest and resulted in a high level of goose damage to the soybean crop in certain fields.

In 2014, there again were a number of calls from farmers in Brown County with crop damage concerns from sandhill cranes. Damage done by cranes is not covered under the program and farmers were referred to USDA-Wildlife Services for technical assistance. The State of Wisconsin is gathering information regarding the extent of sandhill crane damage to agricultural crops and Brown County forwarded these concerns.

West Shore

The West Shore Northern Pike Habitat Restoration Project establishes riparian buffers, removes major stream impediments to fish migration and restores wetland areas along intermittent and perennial streams having a high potential for becoming spawning and rearing areas for northern pike along Green Bay's West Shore. The numbers of northern pike have been declining in Green Bay and the Fox River due to loss of spawning habitat and low bay water levels. This project works toward increasing adult northern pike populations as pike are important both environmentally and economically to the Green Bay community.

Accomplishment discussion:

Spring of 2014 proved to be very successful for northern pike spawning along the west shore of Green Bay. The capture of 36,458 young of the year pike was by far the highest since the LWCD has started evaluating pike reproduction. The evaluation also proved that two out of the three top pike reproduction areas evaluated in 2014 were wetland project sites constructed by the LWCD. The Barkhausen Waterfowl preserve project, which consists of a 6 acre wetland for

pike spawning along with 7 acres of earthen dike rehab and 7 water control structures, will be completed. The total project will have created an additional 36 acres of wetland habitat for fish and waterfowl production. The Longtail Beach Road project was completed by the Village of Suamico. This project removed 900ft of road ditch impediments which annually trapped in excess of 70 adult northern pike each spring.

The pike project has been successful in receiving grants to continue pike habitat work. An additional \$150,000 grant was received from the NRDA Trustee Council, a \$50,000 grant from Ducks Unlimited, and a National fish and Wildlife grant of \$69,890, to construct a fish by pass on Haller Creek at the Brown County Reforestation Camp, were received. Research efforts with UWGB and Shedd Aquarium continue to expand along the east Shore of Brown County and into the tributaries of the Fox River. These continuing research efforts will ultimately help determine the most effective means to restore northern pike populations in the Bay.

- .5 miles of riparian buffers
- 8 acres of wetland spawning marsh
- 7 acres of spawning wetland habitat created. 5 water control structures installed to create an additional 30 acres of emergent and submergent wetland habitat
- 1,800 feet of stream impediment removal
- 30 sites monitored resulting in 36,458 young of the year collected



Fox P Trade

Water Quality Trading can be a reasonable alternative for point source dischargers to meet the effluent limits in their WPDES permit. This system allows point source dischargers to buy “credits” from nonpoint sources in order to meet the pollutant limits in their WPDES permits. The nonpoint source then installs and maintains conservation practices that will reduce phosphorus contributions in the amount needed by the point source. This is advantageous for the point sources when pollutant credits can be purchased for less than the cost of installing additional effluent treatment infrastructure. Currently several stakeholders have been assembled to determine if water quality trading is an economically sound option for meeting water quality goals in the Lower Fox River Basin.

In 2014 staff accomplished:

- Staff completed 565 different cropping scenarios in order to quantify the potential phosphorus reductions from cropland.
- The Department is a key stakeholder on the project's work group committee. Staff participated in numerous meetings and conference calls as well as networked with several stakeholder groups providing technical assistance and practical knowledge to assist in determining the feasibility of P trading in the Lower Fox River Basin.

Accomplishment Discussion

Staff worked with various agencies and private consultants to determine the best way to model nonpoint source P reductions in the watershed. BMPS that would meet both the P reduction goals yet still acceptable to agricultural production needs were analyzed. A determination should be made in 2015 as to the feasibility of P trading in the Lower Fox watershed.

Total Maximum Daily Load (TMDL) Implementation Plan Lower Fox River

In 2014, Brown County LWCD continued to be actively engaged in developing the agricultural recommendations for this implementation planning effort. The Lower Fox River Basin and Lower Green Bay (also referred to as the Green Bay Area of Concern or AOC) are impaired by excessive phosphorus and sediment loading, which leads to nuisance algae growth, oxygen depletion, reduced submerged aquatic vegetation, water clarity problems, and degraded habitat. This plan will focus on specific strategies designed to meet water quality goals in the agricultural sector on the Lower Fox River basin.

Annual Tree Program

Brown County Land & Water Conservation continues to promote the re-establishment of woodlots on marginal cropland and other natural areas of the county with native tree species. In 2014 over 11,000 seedlings were sold and distributed throughout Brown County and northeast Wisconsin.

Accomplishment discussion:

In 2014, the department decided to end our partnership with the Brown County Conservation Alliance in order to maximize revenue and increase efficiencies.

Agriculture Non-point Performance Fee (\$0.50 per acre)

Brown County continues to assess a \$0.50 per acre fee on all lands within the county that are assessed as agriculture. In 2014 this amounted to over 163,000 acres and nearly \$82,000 in revenue for the department.

Accomplishment discussion:

In 2014, the LCC and County Board eliminated Ag bills for parcels less than 4 acres. This will result in a decrease of revenue of approximately \$1200.

Non-Metallic Mining

Brown County Land & Water Conservation provides non-metallic mining plan review, approval, and inspection for PALS.

Accomplishment discussion:

In 2014 one plan was reviewed and approved. Inspections of several existing permits will take place in late 2014.

Groundwater Protection

Through the annual DATCP SWRM allocation, the department has set an internal policy of providing up to \$500 for well abandonments. Due to changes in state code, wells need to be directly impacted by agriculture runoff to be eligible for funding.

Accomplishment discussion:

To date, 2 wells have been abandoned using DATCP funds.

Winter Spreading Plans

Nearly 400 postcards will be sent out in early November reminding farmers that if you they intend to land apply livestock manure to any farm fields, between December 1, 2014 and March 31, 2015, they are required to obtain a Winter Spreading Plan and/or Winter Stacking Site permit. There is no fee for the permit.

Accomplishment discussion:

In 2013-14, 12 plans were developed in critical groundwater protection areas.

Brown County Community Digester Feasibility Study

Brown County is unique in that we have the most CAFO dairy farms (22) in the whole State. Brown County is currently home to over 100,000 dairy animals supported by a shrinking cropland base of less than 160,000 acres. In fact agriculture acreage has actually decreased by approximately 70,000 acres in the last 30 years due to development etc. Brown County is also unique from the standpoint that we have an abundance of freshwater resources that is currently severely impaired by nutrients and total suspended solids from both point and nonpoint pollution. Research shows that Phosphorus is the critical factor to be controlled if water quality improvement is to be realized. Agriculture runoff accounts for 50% of the problem. Agriculture is currently is a \$5.7 Billion industry in Brown County and it's our strong desire to ensure that this industry remains sustainable and economically viable well into the future. This project seeks to explore technological solutions to treat some of the manure generated in the county as well as assess other feedstock's that are currently land applied to agricultural lands. The overall goal of this project is phosphorus removal from the various waste streams that are currently applied to our agricultural landscape. The ability of technology to meet this challenge will have a direct impact on changing the mass balance of legacy phosphorus on the land and in turn positively impacting p loading to our streams, rivers and bay. Wisconsin Public Service recently awarded Brown County a \$300,000 grant to study the feasibility of establishing this type of technology in the County.

Project Accomplishments/discussion:

In 2014, the Department organized a stakeholders group consisting of representatives from Brown County, State Department of Agriculture, UWGB, NWTC, WPS, Advance, Nicolet Bank, Oneida Tribe, NEW Water, DNR and UW Extension. The stakeholders group met 4 times during 2014. An RFP subcommittee will work on RFP development in late 2014 with the hope of releasing the RFP to bid in the first quarter of 2015.

Silver Creek Watershed Project

Silver Creek watershed was selected for the pilot project by NEW Water to determine the potential of utilizing the State approved adaptive management compliance option for meeting their discharge permit requirements for phosphorus. The project area was chosen because of previous work by entities in the watershed, participation by Oneida Nation, the progressive counties and NRCS, and the progressive crop consultants that have been working in the watershed. The overall approach will be to evaluate improvements in in-stream water quality upon installation of agricultural BMPs for nutrient reductions. A combination of soil sampling, GIS mapping, conservation planning, and modeling of BMPs will be used. In 2014, the focus is on obtaining a baseline of existing conditions through field inventories, soil sampling, and field walks to identify potential BMPs in support of future conservation planning. Biological assessments will be completed through Oneida's ongoing efforts. In 2015–17 the focus will shift to development of conservation plans, modeling, installation of BMPs, monitoring, and continued coordination with stakeholders.

Accomplishment Discussion:

In 2014, department staff provided GIS information and technical support to CHM2Hill, NEW Water's private consultant chosen to guide the project. Department staff attended a number of planning meetings and provided a letter of support to the project along with a commitment of in kind technical support over the 5-year project timeframe.

LAND & WATER CONSERVATION DEPARTMENT 5 Year Work Plan

5 year Work Plan Goal and Objective description	2013-2017 Annual Goals	Accomplishments				
		2013	2014	2015	2016	2017
Priority 1 – Working Lands Initiative (WLI)						
1. Assist landowners in complying with NR151 and ATP50	130	120	100			
2. Develop and implement schedules of compliance to meet state conservation standards	100	70	80			
Priority 2 – Great Lakes Demonstration Farm Network						
1. Establish demonstration farms	2-4 farms	4 contacted	4 contracts			
2. Establish a mechanism to transfer information and technology	TBD	Begins 2014	1 field day			
3. Create opportunities for other to test their research at the demonstration farms.	TBD	Begins 2014	3 sites 4 Soil Health sites			
4. Create and implement an information and outreach strategy	TBD	Begins 2014	124 farms surveyed			
Priority 3 – Animal Waste Management Ordinance						
1. Develop new nutrient management plans	5,000 acres	8832				
2. Review current nutrient management plans (acres reviewed & reported)	111,000 acres	124,000	125,000			
3. Inspect farm operations that have >500 animal units	38 farms	38	35			
4. Prepare winter spreading plans	80	76	80			

5 year Work Plan Goal and Objective description	2013-2017 Annual Goals	Accomplishments				
		2013	2014	2015	2016	2017
5. Inspect animal waste complaints	20	19	15			
Priority 4 – Agriculture Shoreland Management Ordinance						
1. Install riparian buffers	3-5 miles	7.5	2			
Priority 5 – 9 Key Element Watershed Plan						
1. Collaborate with Outagamie County and DNR to inventory streams, cropland and production areas	40 production sites, 96 miles stream, 12,000 cropland acres		begin inventory process			
2. Co-author final report with strategy recommendations	1		-			
3. Utilize EVAAL GIS model and Stream Power Index model to target high priority fields for conservation control	TBD		-			
Priority 6 – Multi-County conservation practice tracking system						
1. Collaborate with Outagamie and Calumet Counties on planning meeting	4	-	2			
2. Create GIS based best management practice tracking system – layers developed	TBD	-	-			
Priority 7 – Wildlife Damage Program						
1. Provide technical support to landowners	15	20	22			
2. Provide cost-share for abatement to landowners	2-3	2	1			
3. Process damage claims for crop loss	8-10	9	10			

5 year Work Plan Goal and Objective description	2013-2017 Annual Goals	Accomplishments				
		2013	2014	2015	2016	2017
4. Coordinate with DNR application for shooting permits and damage claims.	5	7	13			
Priority 8 – West Shore Northern Pike Habitat Restoration Project						
1. Install riparian buffers	2 miles	1.27	.5			
2. Install wetland restorations	6-8 acres	3.15	8			
3. Conduct area wide monitoring program to determine project success.	35 sites	32	40			
4. Stream Impediments removed			2			
5. Critical area wetland installed			7			
Priority 9 – Fox P Trade						
1. Provide technical assistance to develop credit model – number model runs	280	-	565			
2. Work with landowner to establish trading credits – develop trading plans	1	-	1			
3. Attend Fox P Trade work group team meetings	12	-	12			
Priority 10 – Assist DNR in drafting the TMDL Implementation Plan						
1. Attend monthly planning meetings of Agricultural Runoff Team until the plan is drafted	12	10	10			
2. Attend quarterly TMDL implementation team meetings	4	6	10			
Priority 11 – Land and Water Conservation Department Administration						
1. Annual tree sale	11,000 trees	11,850	11,000			
2. \$.50 per agriculture acre fee	3,800 bills	3926	3970			

5 year Work Plan Goal and Objective description	2013-2017 Annual Goals	Accomplishments				
		2013	2014	2015	2016	2017
3. Review non-metallic mining reclamation plans	3-5	1-plan 5 –site reviews	1			
4. Newsletter	2					
Priority 12 – Groundwater Protection Areas						
1. Provide cost-sharing to abandon unused wells	15	6	2			
2. Develop winter spreading plans to prevent manure applications in groundwater recharge areas	10	14	12			
Priority 13 – Brown County Community Digester Feasibility Study						
1. Conduct farmer interest survey on potential for participation – farms	15	-	TBD			
2. Draft and release RFP	1	-	TBD			
3. Meetings with consultants	6	-	TBD			
Priority 14 – Silver Creek Watershed Project						
1. Attend meetings	3	-	3			
2. Technical assistance requests	6	-	6			



October 1, 2014

Jim Jolly
Director
Brown County Land Conservation Department
1150 Bellevue Street
Green Bay, WI 54302

Dear Jim:

This letter is to express appreciation on behalf of the Natural Resources Conservation Service (NRCS) for your help in establishing a strong partnership between the Brown County Land Conservation Department (LCD) and NRCS. As a result of our collaborative efforts, we have been able to:

1. Develop a shared vision and commitment to address nutrient and sediment impairments in the Lower Fox River Watershed, and the Bay of Green Bay;
2. Leverage local and Federal financial resources for the purpose of accelerating conservation planning and practice implementation within the Lower Fox River Watershed;
3. Develop a strategic path forward to ensure conservation practice implementation continues to gain momentum;
4. Establish Demonstration Farm Projects to serve as a basis of information and education to all farmers in the Watershed, which will help increase adoption of voluntary conservation practices by more agricultural land managers.

Again, thank you so much for your leadership, as well as assistance, from the Brown County LCD. I am confident our continued collaboration will have a significantly positive impact on sediment and water quality issues in the Lower Fox River Watershed. We look forward to continued, and even greater, success as strengthen our partnership with Brown County.

Sincerely,

JIMMY BRAMBLETT
State Conservationist

cc: Troy Streckenbach, Brown County Executive Director, Green Bay, WI
Norbert Dantine, Jr., Brown County LCC Chair, Luxemburg, WI
Tom Krapf, Assistant State Conservationist, NRCS, Madison, WI
Ty Larson, Assistant State Conservationist-Field Operations, Appleton, WI
Barry Bubolz, Great Lakes Coordinator, NRCS, Appleton, WI

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
Oshkosh Service Center
625 East County Road Y, STE 700
Oshkosh, WI 54901-9731

Scott Walker, Governor
Cathy Stepp, Secretary

State Customer Service # 888-936-7463
Oshkosh FAX# 920-424-4404



September 25, 2014

Jim Jolly, Director
Brown County Land & Water Conservation Department
Ag & Extension Center
1150 Bellevue Street
Green Bay, WI 54302

RE: Support for Brown County Conservation Related Efforts in the Lower Fox Watershed

Dear Mr. Jolly:

On behalf of the Wisconsin Department of Natural Resources (WDNR), I am pleased to be able to offer my support for Brown County Land & Water Conservation Department (Brown Co. LWCD) involvement, initiatives, and partnering regarding conservation efforts within and outside the County. Brown County is a key partner in the regional effort to improve water quality in the Lower Fox River watershed. My understanding is that, in general, Brown Co LWCD is involved in the following conservation related activities:

- 1) Actively participating and contributing to the Lower Fox TMDL Ag Implementation Committee [the Committee has developed implementation strategy and inventory to address ag runoff, through the control of soil and nutrients entering our waterways];
- 2) A partner with the Great Lakes Commission (GLC) and Natural Resources Conservation Service (NRCS) for the Demonstration Farm network; in addition Brown Co LWCD provides project management for the Demo Farm network [Brown Co LWCD has also displayed leadership in pursuing soil health, which most believe will assist in addressing runoff];
- 3) An active and contributing partner with the GLC, NRCS, and WDNR on the Lower Fox Phosphorus Trade project; in fact Brown Co LWCD is providing a portion of the analysis for the Economic Feasibility Study currently being developed;
- 4) Lead on the Brown County Community Digester Committee;
- 5) Partnered with the Alliance for the Great Lakes on a landowner survey designed to gather feedback and gauge perceptions and attitudes of landowners toward conservation. This serves as a great information and educational outreach effort;
- 6) Partnering with NEW Water on NEW Water's Adaptive Management pilot project in the Silver Creek watershed;
- 7) Strategy and initiative in implementing the DATCP Working Lands Initiative;
- 8) Cooperation agreements and cooperation, in general, with NRCS on implementing conservation practices with landowners in Brown County;
- 9) Collaboration with Calumet and Outagamie Counties on developing a uniform GIS based tracking system for conservation practices.

While I wouldn't consider this list as complete, however, I believe the list illustrates an approach to conservation that is comprehensive including collaborative efforts across political boundaries, implementation of NR151 agricultural standards, provides for new conservation practices, project tracking, monitoring of water quality, information and outreach activities, and promotes Wisconsin's relatively new and innovative water quality trading program. The activities support the U. S. Environmental Protection Agency (EPA) and the State of Wisconsin (specifically the WDNR) TMDL implementation efforts occurring within the Lower Fox River Basin. The activities also supports EPA and WDNR efforts to delist the Beneficial Use Impairments (BUIs) caused by excess sediment and nutrients reaching the Lower Fox and Green Bay as outlined in the Lower Green Bay & Fox River Area of Concern (AOC).

The WDNR strongly supports the efforts of Brown County LWCD in controlling nutrient and sediment loadings to the Lower Fox River and Lower Green Bay.

Sincerely,



Keith Marquardt

Fox Wolf TMDL Project Manager – Bureau of Water Quality/Division of Water
Wisconsin Department of Natural Resources

C: Troy Streckenbach, Brown County Executive
Patrick Moynihan, Jr., Chairman, Brown County Board of Supervisors
Norbert Dantine, Jr, Chair, Brown County land Conservation Committee